



ABSTRACT OF THE DISCLOSURE

A process of manufacturing a coated body including a substrate and a hard coating disposed on the substrate, wherein the hard coating has (a) a surface smoothed to have a roughness with maximum height R_z of not larger than $1.2 \mu\text{m}$, and (b) recesses each of which has a size of $0.5\text{-}6.0 \mu\text{m}$ and is formed in the surface, the process including a surface smoothing step of smoothing a surface of the hard coating by using abrasive particles such that the smoothed surface has the roughness with the maximum height R_z of not larger than $1.2 \mu\text{m}$ and such that the recesses each having the size of $0.5\text{-}6.0 \mu\text{m}$ are formed in the surface of the hard coating, wherein each of the abrasive particles used in the surface smoothing step is provided by a spherical-shaped core body made of a rubber and having a particle size of $0.1\text{-}2.0 \text{ mm}$, and hard abrasive grains each having a size of #3000-#10000 and adhering to an outer surface of the spherical-shaped core body.